

Appln. No. 10/680,270
Amendment
Reply to Office Action dated September 3, 2004

Docket No. 304-814

AMENDMENTS TO THE CLAIMS

This listing will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A thermal fuse mechanism for a heating device, with a support and a heating element, said heating element being provided with two contacts and an electrically conductive connection bridge connecting said heating device to a power supply, said connection bridge being mechanically fastened in electrically conductive manner to both said contacts by fastening means and said mechanical fastening of said fastening means is released above a certain melting temperature, said thermal fuse mechanism being positioned on said heating device in such a way that said fastening means are in heat conducting connection with said heating device,

wherein said connection bridge by said mechanical fastening to said contacts by means of said fastening means is secured against moving away due to gravity,

wherein said connection bridge is constructed in such a way that on releasing said fastening at said contacts, there is a tilting moment with respect to at least one of said contacts,

wherein said connection bridge has a centre of gravity, which is located outside a connection line between said two contacts, and

wherein the centre of gravity of said connection bridge is in a horizontal direction outside and laterally alongside said connection line between said two contacts.

2. (Original) Fuse mechanism according to claim 1, wherein said fastening means for fastening said connection bridge to said contacts are formed by solder.

3. (Original) Fuse mechanism according to claim 2, wherein as a result of a material composition of said solder its softening point is adjustable in such a way that with a predetermined association of said fastening with said heating device, a softening occurs at a given heating device temperature.

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4. (Currently amended) Fuse mechanism according to claim 2, wherein said connection bridge is partly metal, wherein said metal is insulated to the outside ~~between said connections to said contacts.~~

5. (Cancelled)

6. (Original) Fuse mechanism according to claim ~~5~~1, wherein said tilting moment occurs with respect to both said contacts.

7-8. (Cancelled)

9. (Currently amended) A fuse mechanism according to claim 1 for a heating device having a support and a heating element, the heating element being provided with two contacts, and an electrically conductive connection bridge connecting the heating device to a power supply, the connection bridge being mechanically fastened in electrically conductive manner to both of the contacts by fastening means, the mechanical fastening of the fastening means being released above a certain melting temperature.

wherein the connection bridge by the mechanical fastening to the contacts by means of the fastening means is secured against moving away due to gravity,

wherein said thermal fuse mechanism is positionable on the heating device in such a way that the fastening means is in heat conducting connection with the heating device, and

wherein said connection bridge is U-shaped.

10. (Currently amended) Heating device having a support and a heating element, as well as a thermal fuse mechanism according to claim 1, wherein said fuse mechanism ~~in the case of correct heating device use~~ is positioned on said heating device in such a way that said fastening means are in heat conducting connection with said heating device.

11. (Original) Heating device according to claim 10, wherein said fastening means are in

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heat conducting connection with said heating element.

12. (Original) Heating device according to claim 10, wherein said fuse mechanism is fastened to said support.

13. (Original) Heating device according to claim 10, wherein, considered in the gravity force direction, said fuse mechanism is located below said heating device.

14. (Original) Heating device according to claim 10, wherein, considered in the gravity force direction, said connection bridge is located below said heating element.

15. (Original) Heating device according to claim 10, wherein, considered in the gravity force direction, said connection bridge is positioned below said contacts.

16. (Original) Heating device according to claim 15, wherein said contacts are flat and run substantially in a horizontal plane.

17. (Original) Heating device according to claim 16, wherein said connection bridge runs substantially in a horizontal plane.

18. (Currently amended) A heating device element according to claim 10 comprising:
a thermal fuse mechanism;
a support;
a heating element having two contacts; and
an electrically conductive connection bridge connecting the heating device to a power supply,

wherein the connection bridge is mechanically fastened in electrically conductive manner to both said contacts by fastening means, the mechanical fastening of the fastening means being released above a certain melting temperature,

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wherein the connection bridge by the mechanical fastening to said contacts by means of the fastening means is secured against moving away due to gravity.

wherein the thermal fuse mechanism is positioned on the heating device in such a way that the fastening means are in heat conducting connection with the heating device, and

wherein said heating element is placed on a flat support and has contacts on the side which, relative to the subsequent installation, constitutes the bottom.

19. (Currently amended) Heating element device according to claim 18, wherein said heating element is located on said bottom.

20. (Currently amended) A heating device according to claim 19 comprising:

a thermal fuse mechanism;

a support;

a heating element having two contacts; and

an electrically conductive connection bridge connecting the heating device to a power supply.

wherein the connection bridge is mechanically fastened in electrically conductive manner to both said contacts by fastening means, the mechanical fastening of the fastening means being released above a certain melting temperature,

wherein the connection bridge by the mechanical fastening to said contacts by means of the fastening means is secured against moving away due to gravity.

wherein the thermal fuse mechanism is positioned on the heating device in such a way that the fastening means are in heat conducting connection with the heating device, and

wherein said heating element is insulated, said heating element and connection bridge crossing one another with an interposed insulation.

21. (Original) Heating device according to claim 20, wherein said insulation is flat and is applied in fixed form to said heating element.

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22. (Original) Heating device according to claim 10, wherein said connections to said contacts are in the form of a resistor and in normal operation said resistor brings about a preheating of said fastening to said contacts.

23. (Currently amended) A heating device according to claim 10 comprising:

a thermal fuse mechanism;

a support;

a heating element having two contacts; and

an electrically conductive connection bridge connecting the heating device to a power supply,

wherein the connection bridge is mechanically fastened in electrically conductive manner to both said contacts by fastening means, the mechanical fastening of the fastening means being released above a certain melting temperature,

wherein the connection bridge by the mechanical fastening to said contacts by means of the fastening means is secured against moving away due to gravity,

wherein the thermal fuse mechanism is positioned on the heating device in such a way that the fastening means are in heat conducting connection with the heating device, and

wherein said connection bridge is constructed as a resistor and has a specific temperature coefficient of said resistor as a function of the temperature.